

# Minnie H. Cui

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## Education

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### University of Wisconsin–Madison, Department of Economics & School of Business

PHD, ECONOMICS & FINANCE

- Majors: Industrial Organization, Finance

Madison, US

2022 – pres.

### University of Texas at Austin, Department of Computer Science

MS, DATA SCIENCE

- Select courses: Deep Learning, Natural Language Processing, Optimization

Austin, US

2021 – 2022

### University of Toronto, Department of Economics

BA HONS., ECONOMICS

- 2018 Canadian Economics Association Best Undergraduate Paper Award
- Concentration: Specialist in Economics and Minor in Mathematics
- Select courses: Applied Econometrics II, International Finance, Economic Growth

Toronto, CA

2014 – 2018

## Experience

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### Analyst

BANK OF CANADA, ECONOMIC AND FINANCIAL RESEARCH DEPARTMENT

- Technical Lead for Canadian NielsenIQ Data and primary data modeler for NielsenIQ Homescan's Microsoft Azure Data Lake/SQL storage solution
- Producing research on household consumption, COVID-19 inflation, niche consumption, transition to online transactions using NielsenIQ Homescan
- Research contributor to the Bank's diversity & inclusion in economics project

Ottawa, CA

2021 – 2022

### Research Assistant

BANK OF CANADA, ECONOMIC AND FINANCIAL RESEARCH DEPARTMENT

- Provided research assistance on publications in the Review of Economic Studies, Journal of Monetary Economics, Economic Journal, Canadian Journal of Economics, and more
- Provided statistical analysis, regression analysis, web-scraping, geo-spatial data analysis for various projects led by Governing Council members and the Bank's Senior Research Officers

Ottawa, CA

2018 – 2021

### Research Assistant

UNIVERSITY OF TORONTO, FACTOR-INWENTASH FACULTY OF SOCIAL WORK

- Generated various infographics summarizing the findings of publications by the Affirmative Research Collaborative and members of the International Partnership for Queer Youth Resilience
- Created and maintained the following websites: [www.inqyr.org](http://www.inqyr.org), [www.affirmativeresearch.org](http://www.affirmativeresearch.org)

Toronto, CA

2016 – 2020

## Projects

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**Canada COVID-19 Tracker** | [https://mhcui.shinyapps.io/Canada\\_COVID/](https://mhcui.shinyapps.io/Canada_COVID/)

R SHINY APPS

- Developed a dashboard that tracks Canadian daily COVID-19 cases, deaths, vaccination rates, government stringency, economic impact, and several dynamic metrics unavailable elsewhere
- Updated daily

2020 – pres.

**Canada Daily Climate Data Set** | [https://github.com/minnzc/Canada\\_Daily\\_Climate/](https://github.com/minnzc/Canada_Daily_Climate/)

PYTHON, GIT

- Created daily Canada average climate conditions (maximum, minimum, and average temperatures, total precipitation, wind gust, and more) by Census divisions and Census subdivisions data sets
- Updated weekly

2021 – pres.

## Publications

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**Cui, M. H.**, Jiang, G. Mosweu B. (2021). Swimming in the Data Lake: An application to NielsenIQ Homescan [Paper Presentation]. Bank for International Settlements IFC Workshop on Data Science in Central Banking.

**Cui, M. H.** & Kryvtsov, O. (2021). Falling Niche Consumption: the case of Canada 2013-2020. Working paper.

**Cui, M. H.**, Shuai, A. & Tino, S. (2018). Relative age and early childhood participation in extracurricular activities. Working paper.

## Presentations

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*Presenting author for all listed.*

2022 **BIS**, IFC Data Science in Central Banking *Online*

2021 **ISEAPA**, North American Productivity Workshop *Online*

2018 **Canadian Economics Association**, CEA Annual Conference *Montreal, QC*

## Fellowships, Scholarships, Awards

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2022–2026 **Doctoral Fellowship**, SSHRC

2020 **Women in Economics Scholarship**, Bank of Canada

2018 **Best Undergraduate Paper**, Canadian Economics Association  
**The Regents Participation Awards**, University of Toronto

2017 **Richard Iorweth Thorman Bursary**, University of Toronto  
**Kathleen Watson Memorial Award**, University of Toronto

2016 **The William and Margaret Wilson Bursary**, University of Toronto  
**Hosinec Family Scholarship**, University of Toronto  
**President's Scholar Program Scholarship**, University of Toronto

## Technical Skills

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Analysis	Machine learning, deep learning, geo-spatial analysis, regression analysis
Languages	Python, Matlab, R, SQL, HTML/CSS
Developer	Git, Microsoft Azure, Google Cloud Platform, Amazon Web Services, VS Code, Anaconda, PyCharm
Softwares	Stata, Excel
Create data	Simulation & modelling, web-scraping

## Citizenship & Language Proficiency

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Citizenship	Canada
Languages	English (native), Mandarin (native), French (fluent)